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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Group Art Unit: 2157
: Examiner A. M. Gold
Anand N. Babu et al. : Intellectual Property
Serial No: 09/773,193 : Law Department - 4054
Filed: January 31, 2001 : International Business
Title: SYSTEM AND METHOD : Machines Corporation
FOR HANDLING LOCATION : 11400 Burnet Road
INFORMATION : Austin, Texas 78758
Date: 6/29/07 : Customer No. 32,329

BRIEF ON APPEAL

Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Sir:

It is respectfully requested that the fee for this Brief on Appeal be waived as the Appellants has already paid both a Notice of Appeal fee and Appeal Brief fee on a previous appeal herein after which the Examiner withdrew a Final Rejection and issued a new rejection which resumed the prosecution herein.

This is an Appeal from the Final Rejection of Claims 1, 2, 4, 7, 8, 13, 14, 16, 19, 20, 25, 26, and 28 of this Application dated January 29, 2007. Section VIII. Appendix containing a copy of each of the Claims is attached.

I. Real Party in Interest

The real party in interest is International Business Machines Corporation, the assignee of the present Application.

II. Related Appeals and Interferences

None

III. Status of Claims

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

There are 13 claims in this Application.

B. STATUS OF ALL THE CLAIMS

1. Claims cancelled: 3, 5-6, 9-12, 15, 17-18, 21-24, 27, and 29-36.

2. Claims withdrawn from consideration but not cancelled: None.

3. Claims pending: 1, 2, 4, 7, 8, 13, 14, 16, 19, 20, 25, 26, and 28.

4. Claims allowed: None.

5. Claims rejected: 1, 2, 4, 7, 8, 13, 14, 16, 19, 20, 25, 26, and 28.

C. CLAIMS ON APPEAL

Claims on appeal: 1, 2, 4, 7, 8, 13, 14, 16, 19, 20, 25, 26, and 28.

IV Status of Amendments

No amendments have been filed after Final Rejection.

V. Summary of Claimed Invention

Claim 1 is annotated as follows with respect to the Specification and Drawings.

1. A method for handling location information regarding a mobile user having a plurality of associated location sources (page 4, specification, lines 39-44 describe location sources as any electronic source of location data, e.g. mobile devices: mobile telephones, personal digital assistants, pagers or GPS devices), said method comprising simultaneously acquiring items of location data regarding said user from said plurality of location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40);

creating a collection of said location data regarding said user (Fig 1, as described at page 5, lines 9-15 including location aggregator 20 and location logician 30);

determining an expected most accurate location source of said plurality of associated location sources (in referring to the functions of logician 30, Fig. 1 and functions described with reference to Fig. 3, the specification from Page 7, line 44 though page 8, line 2 describes determining the most accurate and precise location sources);

ranking items of location data in said collection to define the location of said user according to the expected most accurate location source of said plurality of

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associated location sources (with reference to Fig. 3, the specification from Page 7, line 44 through page 8, line 2 describes ranking according to the most accurate and precise location sources); and

updating said location data continuously with said defined location of said user (Fig. 6, referred to on page 12, lines 35-44 in the specification describes the continuous updating of the location data from multiple sources).

Claim 7 is annotated as follows with respect to the Specification and Drawings.

7. A method for handling location information regarding a mobile user having a plurality of associated location sources (page 4, specification, lines 39-44 describe location sources as any electronic source of location data, e.g. mobile devices: mobile telephones, personal digital assistants, pagers or GPS devices), said method comprising:

simultaneously acquiring items of location data regarding said user from said plurality of location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40);

ranking items of location data in a collection of said location data regarding said mobile user according to an expected most accurate location source of said plurality of associated location sources (with reference to Fig. 3, the specification from Page 7, line 44 though page 8, line 2 describes ranking according to the most accurate and precise location sources); and

updating said location data continuously (Fig. 6, referred to on page 12, lines 35-44 in the specification describes the continuous updating of the location data from multiple sources).

Claim 13 is annotated as follows with respect to the Specification and Drawings.

13. An information handling system for handling location information regarding a mobile user having a plurality of associated location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40), said information handling system comprising:

means for simultaneously acquiring items of location data regarding said user from said plurality of location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40);

means for creating a collection of said location data regarding said user (Fig 1, as described at page 5, lines 9-15 including location aggregator 20 and location logician 30);

means for determining an expected most accurate location source of said plurality of associated location sources (in referring to the functions of logician 30, Fig. 1 and functions described with reference to Fig. 3, the specification from Page 7, line 44 though page 8, line 2 describes determining the most accurate and precise location sources);

means for ranking items of location data in said collection to define the location of said user according to the expected most accurate location source of said plurality of associated location sources (with reference to Fig. 3, the specification from Page 7, line 44 through page 8, line 2 describes ranking according to the most accurate and precise location sources); and

means for updating said location data continuously with said defined location of said user (Fig. 6, referred to on page 12, lines 35-44 in the specification describes the continuous updating of the location data from multiple sources).

Claim 19 is annotated as follows with respect to the Specification and Drawings.

19. An information handling system for handling location information regarding a mobile user having a plurality of associated location sources (page 4, specification, lines 39-44 describe location sources as any electronic source of location data, e.g. mobile devices: mobile telephones, personal digital assistants, pagers or GPS devices), said information handling system comprising:

means for simultaneously acquiring items of location data regarding said user from said plurality of location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40);

means for ranking items of location data in a collection of said location data regarding said mobile user according to an expected most accurate location source of said plurality of associated location sources (with reference to Fig. 3, the specification from Page 7, line 44 though page 8, line 2 describes ranking according to the most accurate and precise location sources); and

means for updating said location data continuously (Fig. 6, referred to on page 12, lines 35-44 in the specification describes the continuous updating of the location data from multiple sources).

Claim 25 is annotated as follows with respect to the Specification and Drawings.

25. A computer usable medium having computer usable instructions (specification, page 14, lines 30-41) for handling location information regarding a mobile user having a plurality of associated location sources (page 4, specification, lines 39-44 describe location sources as any electronic source of location data, e.g. mobile devices: mobile telephones, personal digital assistants, pagers or GPS devices) comprising:

means for simultaneously acquiring items of location data regarding said user from said plurality of location sources (Fig. 1, as described at page 5, lines 3-9; the input from sources 101, 102, 103, and 104 are transmitted in parallel via network to the information handling system 10 wherein position is determined; also see the parallel polling of multiple location threads 601-603 of location data from three respective locations in Fig. 6, as described at page 12, lines 35-40);

means for creating a collection of said location data regarding said user (Fig 1, as described at page 5, lines 9-15 including location aggregator 20 and location logician 30);

means for determining an expected most accurate location source of said plurality of associated location sources (in referring to the functions of logician 30, Fig. 1 and functions described with reference to Fig. 3, the specification from Page 7, line 44 though page 8, line 2 describes determining the most accurate and precise location sources);

means for ranking items of location data in said collection to define the location of said user according to

the expected most accurate location source of said plurality of associated location sources (with reference to Fig. 3, the specification from Page 7, line 44 through page 8, line 2 describes ranking according to the most accurate and precise location sources); and

means for updating said location data continuously with said defined location of said user (Fig. 6, referred to on page 12, lines 35-44 in the specification describes the continuous updating of the location data from multiple sources).

VI. Grounds of Rejection

Claims 1, 2, 4, 7, 8, 13, 14, 16, 19, 20, 25, 26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunn et al. (US6,738,628).

Claims 1, 7, 13, 19, and 25 are rejected under 35 U.S.C. 112, first paragraph as containing subject matter not enabled in the specification.

* * * * *

VII. Argument

The rejection of claims 1-2, 4, 7-8, 13-14, 16, 19-20, 25-26, and 28 as being anticipated by Dunn et al. (US5,659,596) under 35 USC 102(e) is respectfully traversed.

The rejection of claims 1-2, 4, 7-8, 13-14, 16, 19-20, 25-26, and 28 as being anticipated by Dunn et al. (US5,659,596) under 35 USC 102(e) is respectfully traversed. It is submitted that a rejection based on anticipation under 35 U.S.C. 102, must expressly or impliedly teach every element of invention without modification. The Examiner's application of the Dunn patent does not meet this standard with respect to claims 1-2, 4, 7-8, 13-14, 16, 19-20, 25-26, and 28. Dunn does not disclose the following elements in each of these claims: simultaneously determining a location of a mobile user by items of location data from each of a plurality of said associated location sources, and updating the location of said mobile user with the location data determined by the expected most accurate of the associated location sources.

The present invention tracks a mobile user based upon location data simultaneously acquired from multiple location sources which may accompany the moving user. Such location sources are defined in the present specification (P. 4, lines 39-44) by examples: mobile telephones, personal digital assistants, pagers, global positioning devices, and monitored user calendars giving user's expected locations at certain times. Updating the location of said mobile user with the location data determined by the expected most accurate of said associated location sources is described in the present specification (Page 7, line 43 to page 8, line 2). For example, location data from a location source which

is capable of a more precise measurement is given priority over a less precise location source.

Dunn does not disclose such multiple location sources or simultaneously acquiring data on location of a mobile user from a plurality of location sources, and updating the user location by location data determined by the expected most accurate of these associated location sources . Dunn is concerned with locating users of mobile telephones but he does so merely by time stamping each communication of the mobile telephone or like device being tracked. By comparing these time stamps, Dunn determines the latest position of his device. There is no teaching of determining a mobile user location by the most accurate of simultaneous location sources. The Examiner cites column 29, lines 39-57 as disclosing this element. All this section discloses is that the location is determined by the last time stamp as described above. At best, the last time stamp indicates the latest location of a sequence of location data items (as indicated by time stamps) from a single device, and not, as claimed herein, the location data item from the most accurate location source in a plurality of location data items respectively received from a plurality of location sources (devices).

Accordingly, Appellants submit that the teaching of Dunn as applied by Examiner can not serve as teaching to anticipate the present claimed invention under 35 U.S.C. 102. The reference does not teach every element of the present invention without modification since it does not teach location data acquired simultaneously from each of a plurality of user associated location sources, and updating the location of the mobile user with the location data determined by the expected most accurate of the associated location sources.

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The Rejection of Claims 1, 7, 13, 19, and 25 under 35 U.S.C. 112, first paragraph, as Containing Subject Matter Not Enabled in the Specification is Respectfully Traversed

These claims describe simultaneously determining a location of a mobile user by location data acquired from each of a plurality of said associated location sources, and updating the location of said mobile user with the location data determined by the expected most accurate of said associated location sources.

Examiner argues that there is no enabling embodiment for "simultaneously" acquiring items of location data from each of a plurality of location sources. Examiner contends that the term "simultaneously" has no supporting embodiment in the specification.

Appellants submit that just because the term "simultaneously" has not been expressly used in the specification does not mean that the embodiment of that term is not enabled by the specification. In the paragraph from page 2, line 40 through page 3, line 2, multiple devices are described which may be accessed to determine the user's location through the plurality of mobile devices which the user may have with him. The plural parallel devices 101 to 104 in Fig. 1, 101 to 103 in Fig. 3, or 402 and 403 in Fig. 5 are examples of parallel mobile devices accompanying the user which provide location data simultaneously.

In the prosecution, Examiner has raised the semantic issue, argued above that the plurality of location sources defined in the claims could be read on a sequence of location source data items from single device over a sequence of time. In order to limit the claims to avoid any such semantic reading of the claims, Appellants included the

term "simultaneously" acquiring location source data from the plurality of mobile devices accompanying the user.

The term "simultaneously" was not used previously because it was implicit in the teaching of the invention, and the subject matter defined in the claims. What would be the advantage in the defined ranking of the acquired location data items based upon the most accurate of the plurality of location sources if the teaching of this aspect of the present invention were intended to cover location source data which was not simultaneously acquired? In such a case, there would be no need to have location source data from each of a plurality of location devices. It would only be necessary to track the sequence of location data items of a single device over a period of time, and to use the latest location source item, as in Dunn.

Accordingly it is submitted that the term simultaneously acquiring items of location data is enabled in the present specification and implicit in the specification teaching.

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Conclusion

In view of the foregoing, the Board of Appeals is respectfully requested to reverse the Final Rejection and find that:

Claims 1-2, 4, 7-8, 13-14, 16, 19-20, 25-26, and 28 are not anticipated by Dunn et al. (US5,659,596) under 35 U.S.C. 102(e); and

Claims 1, 7, 13, 19, and 25 comply with the requirements of 35 U.S.C. 112, first paragraph requirements in that the terms used in the claims are enabled by the specification.

Respectfully submitted,


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VIII. Claims Appendix

1. A method for handling location information regarding a mobile user having a plurality of associated location sources, said method comprising

simultaneously acquiring items of location data regarding said user from said plurality of location sources; creating a collection of said location data regarding said user;

determining an expected most accurate location source of said plurality of associated location sources;

ranking items of location data in said collection to define the location of said user according to the expected most accurate location source of said plurality of associated location sources; and

updating said location data continuously with said defined location of said user.

2. The method of claim 1 further comprising: filtering said location data to remove misleading data.

4. The method of claim 1 wherein: said acquiring further comprises acquiring location data regarding more than one user, and said ranking further comprises ranking items in said collections regarding more than one user, according to the expected most accurate location source of each of said plurality of associated location sources for each of said users.

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7. A method for handling location information regarding a mobile user having a plurality of associated location sources, said method comprising:

simultaneously acquiring items of location data regarding said user from said plurality of location sources;

ranking items of location data in a collection of said location data regarding said mobile user according to an expected most accurate location source of said plurality of associated location sources; and

updating said location data continuously.

8. The method of claim 7 further comprising: filtering said location data to remove misleading data.

13. An information handling system for handling location information regarding a mobile user having a plurality of associated location sources, said information handling system comprising:

means for simultaneously acquiring items of location data regarding said user from said plurality of location sources;

means for creating a collection of said location data regarding said user;

means for determining an expected most accurate location source of said plurality of associated location sources;

means for ranking items of location data in said collection to define the location of said user according to the expected most accurate location source of said plurality of associated location sources; and

means for updating said location data continuously with said defined location of said user.

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14. The information handling system of claim 13, further comprising: means for filtering said location data to remove misleading data.

16. The information handling system of claim 13 wherein: said means for acquiring further comprises means for acquiring location data regarding more than one user; said means for creating further comprises means for creating collections of said location data regarding more than one user; and said means for ranking further comprises means for ranking items in said collections regarding more than one user, according to expected most accurate location source of each of said plurality of associated location sources for each of said users.

19. An information handling system for handling location information regarding a mobile user having a plurality of associated location sources, said information handling system comprising:

- means for simultaneously acquiring items of location data regarding said user from said plurality of location sources;

- means for ranking items of location data in a collection of said location data regarding said mobile user according to an expected most accurate location source of said plurality of associated location sources; and

- means for updating said location data continuously.

20. The information handling system of claim 19 further comprising: means for filtering said location data to remove misleading data.

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25. A computer usable medium having computer usable instructions for handling location information regarding a mobile user having a plurality of associated location sources comprising:

means for simultaneously acquiring items of location data regarding said user from said plurality of location sources;

means for creating a collection of said location data regarding said user;

means for determining an expected most accurate location source of said plurality of associated location sources;

means for ranking items of location data in said collection to define the location of said user according to the expected most accurate location source of said plurality of associated location sources; and

means for updating said location data continuously with said defined location of said user.

26. The computer-usable medium of claim 25, further comprising: means for filtering said location data to remove misleading data.

28. The computer usable medium of claim 25 wherein: said means for creating further comprises means for creating collections of said location data regarding more than one user; and said means for ranking further comprises means for ranking items in said collections regarding more than one user, according to an expected most accurate location source of each of said plurality of associated location sources for each of said users.

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IX. Evidence Appendix

There was no evidence presented in the proecution of
the present Application.

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There was no evidence presented in the prosecution of
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X. Related Proceedings Appendix

There are no proceedings related to the present proceedings.

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